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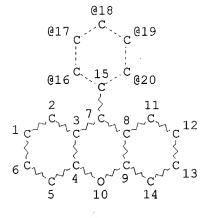
FILE COVERS 1907 - 31 Aug 2004 VOL 141 ISS 10 FILE LAST UPDATED: 30 Aug 2004 (20040830/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

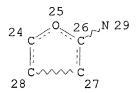
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CONNECT IS E2 RC AT 22
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 29

STEREO ATTRIBUTES: NONE

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L4
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    ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                        2001:338638 HCAPLUS
DOCUMENT NUMBER:
                        134:350265
TITLE:
                        Water-soluble red-emitting fluorescent rhodamine dyes
                        and energy-transfer dye pairs and conjugates for
                         assays and stains
INVENTOR(S):
                        Lee, Linda G.; Graham, Ronald J.; Werner, William E.;
                         Swartzman, Elana; Lu, Lily
PATENT ASSIGNEE(S):
                         PE Corporation, USA
                         PCT Int. Appl., 172 pp.
SOURCE:
                        CODEN: PIXXD2
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
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PRIORITY APPLN. INFO.:
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                                                              W 20001101
                                           WO 2000-US30414
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MARPAT 134:350265

OTHER SOURCE(S):

GΙ

Ι

The present invention provides novel, water-soluble, red-emitting fluorescent AΒ rhodamine dyes and red-emitting fluorescent energy-transfer dye pairs, as well as labeled conjugates comprising the same and methods for their use. The dyes, energy-transfer dye pairs and labeled conjugates are useful in a variety of aqueous-based applications, particularly in assays involving staining of cells, protein binding, and/or anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing. A fluorescent-linked immunosorbent assay (FLISA) for human IL-8 used anti-human IL-8 antibody conjugated with rhodamine dye I (preparation given) and monoclonal anti-human IL-8 antibody-coated beads.

## ΙT 339150-41-3 339150-42-4

RL: ARG (Analytical reagent use); PRP (Properties); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses) (as FRET-labeled terminator for Sanger-type sequencing; water-soluble red-emitting fluorescent rhodamine dyes and energy-transfer dye pairs and conjugates for assays and stains)

339150-41-3 HCAPLUS RN CN

Pyridinium, 1,1',1''-[3-[[4-[[[[4-[[[[6-[[[3-[4-amino-7-[(2R,5S)tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7triphosphahept-1-yl)-2-furanyl]-7H-pyrrolo[2,3-d]pyrimidin-5-yl]-2propynyl]amino]carbonyl]-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl]methyl]amino]carbonyl]phenyl]methyl]amino]carbonyl]phen yl]thio]-6-carboxy-5-[1,11-diethyl-1,2,10,11-tetrahydro-2,2,4,8,10,10hexamethylpyrano[3,2-g:5,6-g']diquinolin-13-ium-6-yl]-1,2,4benzenetriyl]tris[4-(dimethylamino)-, tetrakis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

## PAGE 1-B

PAGE 2-B

RN 339150-42-4 HCAPLUS
Pyridinium, 1,1',1''-[3-[[4-[[[4-[[[5-[[3-[2-amino-4,7-dihydro-4-oxo-7-[(2R,5s)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-1H-pyrrolo[2,3-d]pyrimidin-5-yl]-2-propynyl]amino]carbonyl]-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl]methyl]amino]carbonyl]phenyl]methyl]amino]carbonyl]phenyl]thio]-6-carboxy-5-(3,6-diaminoxanthylium-9-yl)-1,2,4-benzenetriyl]tris[4-(dimethylamino)-, tetrakis(inner salt) (9CI) (CA)

INDEX NAME)

Absolute stereochemistry.

## PAGE 1-B

PAGE 2-A

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PAGE 2-B

PAGE 3-A

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IT 339150-43-5

RL: ARG (Analytical reagent use); PRP (Properties); RCT (Reactant); ANST (Analytical study); RACT (Reactant or reagent); USES (Uses)

(water-soluble red-emitting fluorescent rhodamine dyes and energy-transfer dye pairs and conjugates for assays and stains)

RN 339150-43-5 HCAPLUS

Pyridinium, 1,1',1''-[3-[[4-[[[[4-[[[[5-[[[3-[4-amino-1,2-dihydro-2-oxo-1-[(2R,5S)-tetrahydro-5-(3,5,7,7-tetrahydroxy-3,5,7-trioxido-2,4,6-trioxa-3,5,7-triphosphahept-1-yl)-2-furanyl]-5-pyrimidinyl]-2-propynyl]amino]carbonyl]-3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-4'-yl]methyl]amino]carbonyl]phenyl]methyl]amino]carbonyl]phenyl]thio]-6-carboxy-5-(2,3,16,17-tetrahydro-1H,5H,13H,15H-xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium-9-yl)-1,2,4-benzenetriyl]tris[4-(dimethylamino)-, tetrakis(inner salt) (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

PAGE 2-B

Searched by P. Ruppel

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS 5 REFERENCE COUNT: RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:131227 HCAPLUS

DOCUMENT NUMBER:

134:179914

TITLE:

Water-soluble rhodamine dyes and conjugates thereof Lee, Linda G.; Graham, Ronald J.; Werner, William E.;

Swartzman, Elana; Lu, Lily

PATENT ASSIGNEE(S):

PE Corp., USA U.S., 52 pp.

SOURCE:

CODEN: USXXAM

DOCUMENT TYPE:

INVENTOR(S):

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.			KIND		DATE		APPLICATION NO.						DATE			
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US 6372907						US 2000-661206										
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MARPAT 134:179914 OTHER SOURCE(S):

The present invention provides novel, water-soluble, red-emitting fluorescent rhodamine dyes and red-emitting fluorescent energy-transfer dye pairs, as well as labeled conjugates comprising the same and methods for their use. The dyes, energy-transfer dye pairs and labeled conjugates are useful in a variety of aqueous-based applications, particularly in assays involving staining of cells, protein binding, and/or anal. of nucleic acids, such as hybridization assays and nucleic acid sequencing.

## TΤ

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(dye; production of fluorescent rhodamine dyes for biochem. labeling)

326801-89-2 HCAPLUS RN

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PAGE 1-A

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PAGE 1-B

PAGE 2-A

REFERENCE COUNT:

THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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